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AIR OPERATING PERMIT NO. 000369-7

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In compliance with the provisions of the State of Washington
Clean Air Act Chapter 70.94 Revised Code of Washington

Boise White Paper, L.L.C
Wallula, Washington

is authorized to operate in accordance
with the terms and conditions
of this Permit.

Issued by:

State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
P.O. Box 47600
Olympia, Washington 98504-7600

Carol Kraege
Industrial Section Manager

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INTRODUCTION AND LEGAL AUTHORITY

This Air Operating Permit ("Permit") is authorized under the Operating Permit Regulation, Chapter 173-401 WAC. The provisions of this Permit describe the emissions limitations, operating requirements, monitoring and recordkeeping requirements, and reporting frequencies for the permitted source.

The Boise White Paper, L.L.C, previously titled, "Boise Cascade Corporation", Wallula Mill ("Boise"), requires a Title V Air Operating Permit because it emits, or has the potential to emit, one hundred tons per year or more of one or more air pollutants. [WAC 173-401-300(1).]

During the drafting of this Permit, Ecology has attempted to incorporate requirements using the exact language of the law, regulation, or order. Where there is a difference in language, this difference is presented in this Permit only for clarification of the underlying requirement. The legal requirement remains the underlying requirement. Any conflict between the Permit and an underlying requirement that is not acknowledged in this Permit or its support document, nor is addressed in past orders or permits referenced in this Permit or its support document, will be resolved by referring to the underlying requirement. Unless otherwise stated, the effective date of referenced regulations or statutes is that of the provision in effect on the date of Permit issuance. Compliance with underlying requirements shall be demonstrated using the methods specified in this Permit or the support document.

The Title V Air Operating Permit consists of all parts of this assembled document, including its footnotes and Appendices, but does not include the accompanying support document, nor the Title V permit application materials submitted by Boise nor any other past orders or permits.

The definition of terms contained in WAC 173-401-200, and as defined in all referenced regulations, applies to this Permit unless otherwise defined in the Permit.

EMISSION UNIT-SPECIFIC REQUIREMENTS [WAC 173-401-600]

This section contains requirements applicable to described units. General requirements that apply to monitoring, recordkeeping, and reporting for these limits are in the Facility-Wide Requirements section of this Permit. Monitoring and reporting requirements that are specific to each limit are listed in the emission unit-specific tables and should be read in conjunction with the general requirements. Unless specified otherwise, the basis of authority for the type and frequency of monitoring imposed is WAC 173-401-615.

Refer to Appendix C for emission estimate algorithms. These algorithms set forth the calculation method for those emission limits that the required reference method itself does not yield a direct emission measurement. The permittee may use an equivalent method with written approval from Ecology.

Boise shall comply with the remaining applicable MACT I (Phase II HVLC) standards as described in 40 CFR 63.443 and 63.447 (CCA Alternative), and as listed in this Permit, not later than the April 15, 2006, compliance date, unless an extension is granted.

A. No. 2 Recovery Furnace

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.A.1.a	Particulate and HAP (metals)	0.044 gr/dscf at 8% O_2	Sample at least annually consisting of three 1-hour test using EPA Method 5 or a test method approved in writing by Ecology. Report test results in the monthly report.[2] The permittee shall comply with Condition I.A.7 for minimum O&M requirements intended to indicate compliance with the particulate limit.	PSD-X-77-04 and 40 CF60.862.(a)(1)(i) for PM limit. 40 CFR63.862(a)(1)(i) for PM surrogate HAP limit. 40 CFR 63.865(b)(1) for RM
I.A.1.b	Particulate	0.1 gr/dscf @ 8% O_2 avg over three 1-hour tests	EPA RM 5 is the reference test method	WAC 173-400-091(2)
I.A.2.a	Particulate	476 lbs/day, rolling annual average.	Daily average value is calculated using actual emissions from previous stack test results. Report test results in the monthly report.[2]	PSD-X-77-04 as consolidated in Order DE 96-AQI078
I.A.2.b	Particulate	75 tons per year, 12-month rolling annual average, calculated monthly.	12-month rolling annual average value is calculated using emissions data from previous stack tests using EPA Method 5. Report test results and calculated emissions in the monthly report.	Order No. DE 02AQ9IS-5019, WAC 173-400-091
I.A.2.c	PM_{10}	63 tons per year, 12-month rolling annual average, calculated monthly.	12-month rolling annual average value is calculated using emissions data from previous stack tests using EPA Method 5. Report test results and calculated emissions in the monthly report.	Order No. DE 02AQ91S-5019, WAC 173-400-091

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.A.3.a	Opacity and NESHAPS	Average 35% for more than six consecutive minutes in any 60-minute period.	EPA Method 9 is the reference test method. If the total number of contiguous periods of excess emissions in a quarter is less than 6% of the total number of operating hours (excluding periods of start-up, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement. The permittee shall comply with Condition I.A.7 for opacity monitoring and reporting requirements.	40 CFR 60.282(a)(1)(ii) and WAC 173-405-040(6) for opacity standard 40 CFR 60.11(b) for RM. 40 CFR 60.284(a)(1) and 40 CFR 60.13(h) for CEM requirements. 40 CFR 60.284(e)(1)(ii) for excess emission allowance.
I.A.3.b	Opacity and NESHAPS	Opacity is greater than 35% for 6% or more of the operating time within any quarterly period.	Monitored with Continuous Monitoring System. Report excursions in the semi-annual report.[11,12,13]	40 CFR 63.864(c)(2)(i) for NESHAPS HAP definition of limit violation. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 CFR 63.8(c)(4); and 40 CFR 60.13(e) for COMS data recovery.
I.A.4	SO_2	500 ppm at 8% O_2, hourly average.	Sample monthly consisting of three 1-hour test using EPA Method 6 or a test method approved in writing by Ecology. Report test results in the monthly report.[2]	WAC 173-405-040(11)(a)
I.A.5.a	SO_2	5424 lbs/day, rolling annual average.	Daily average value is calculated using actual emissions from previous stack test results. Report excursions in the monthly report.[2]	PSD-X-77-04 as consolidated in Order DE 96-AQI078
I.A.5.b	SO_2	585 tons per year, 12-month rolling annual average, calculated monthly.	12-month rolling annual average value is calculated using CEM concentration data and air flow data from stack test results. Report test results and calculated emissions in the monthly report. [11,14]	Order No. DE 02AQ91S-5019 based on WAC 173-400-091(2); WAC 173-401-615(1)(c); and WAC 173-400-105(5)(h); for CEMS data recovery.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.A.6	TRS	5 ppmvd at 8% O_2, 12-hour average.	Monitor continuously using EPA Method 16. Report excursions in the monthly report. If the total number of contiguous periods of excess emissions in a quarter is less than 1% of the total number of operating hours (excluding periods of start-up, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement.[11,13]	40 CFR 60.283(a)(2) for limit. 40 CFR 60.284(e)(1)(i) for excursion allowance. WAC 173-401-615(1); WAC 173-400-105(5)(h); and 40 CFR §60.13(e) for CEMS data recovery.
I.A.7	Operation	Minimum operating condition.	Monitor opacity continuously using an approved COMS and is operated in conformance with 40 CFR Part 60 (July 1, 1992), App. B and App. F, Perf. Spec. 1. The permittee shall operate the continuous opacity monitor as a performance indicator to show continuous operation of the pollution control device. If opacity exceeds 20% for more than ten consecutive six minute blocks the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours may be a violation of the underlying applicable requirement. Report corrective actions and performance indicator deviations in the monthly report. [11,12]	40 CFR 63.864 (c)(1); WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for CEMS data recovery.
I.A.8	NESHAPS Startup, Shutdown, and Malfunction (SSM) Plan	NA	Refer to the generic NESHAPS SSM Plan components following the emission unit specific section of this permit.	40 CFR 63.6(e)(3) for SSM requirements.

B. No. 3 Recovery Furnace

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.B.1.a	Particulate (PM/PM_{10})	0.027 gr/dscf at 8% O_2, hourly average. 0.021 gr/dscf at 8% O_2, rolling annual average.[7] 186 tpy rolling average	Sample monthly consisting of three 1-hour test using EPA Method 5 or a test method approved in writing by Ecology.[3] Report test results in the monthly report[2]. The Permittee shall comply with Condition I.B.4.a for minimum O&M requirements intended to indicate compliance with the particulate limits.	WAC 173-400-112 (Lowest Achievable Emission Rate — state nonattainment new source review) as implemented in Order DE 02-AQIS-3588 for PM limits. 40 CFR 63.865(b)(1) for test method application.
I.B.1.b	Particulate and HAP (PM as surrogate)	0.044 gr/dscf @ 8%.	EPA Method 5 or a test method approved in writing by Ecology.	40 CFR60.282(a)(1)(i) for PM limit. 40 CFR63.862(a)(1)(i) for HAP limit.
I.B.1.c	Particulate	0.10 gr/dscf @ 8% O2 averaged over	EPA Method 5 or a test method approved in writing by Ecology.	WAC 173-405-040(1) for limit.
I.B.2.a	Opacity	35% for more than six consecutive minutes in any 60-minute period.	EPA Method 9 is the reference test method. The permittee shall comply with Condition I.B.4 for opacity and reporting requirements.	WAC 173-405-040(6)
I.B.2.b	Opacity/ Visible Emissions	When firing exclusively fuel oil, 20% opacity for more than six consecutive minutes in any 60-minute period.	EPA Method 9 is the primary reference test method. Boise shall install, calibrate, maintain, and operate a continuous monitoring system to monitor opacity from the No. 3 recovery furnace. Report exceedances to Administrator (Ecology) semiannually or more frequently as directed by Ecology. [11,13]	NSPS Subpart Db 40 CFR 60.43b(f) and Order DE 96-AQ-I078 for opacity limit. 40 CFR 60.46b(d)(7) for basis of compliance test method. 40 CFR 60.48b(a) for COMS requirement. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for COMS data recovery

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.B.2.c	Opacity/ Visible Emissions	35%, six-minute average.[4]	EPA Method 9 is the primary reference test method. Boise shall install, calibrate, maintain, and operate a continuous monitoring system to monitor opacity from the No. 3 Recovery Furnace. [11,13]	40 CFR 60.11(b) for RM. 40 CFR 60.13(h) for COM data management. 40 CFR 60.282(a)(1)(ii) for opacity limit. 40 CFR 60.284(a)(1) for COM.. 40 CFR 60.284(e)(1)(ii) for excursion allowance. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for COMS data recovery.
I.B.2.d	Opacity/ Visible Emissions	Opacity is greater than 35% for 6% or more of the operating time within any quarterly period.	Monitored with Continuous Monitoring System. Report in excursions in the semi-annual report.[11,13]	40 CFR 63.864(c)(2)(i) for excursion allowance limitation. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 CFR 63.8(c)(4); and 40 CFR §60.13(e) for COMS data recovery.
I.B.3	**Reserved**			
I.B.4.a	Operation	Minimum operating condition.	Monitor opacity continuously using an approved COMS and is operated in conformance with 40 CFR Part 60 (July 1, 1992), App. B and App. F, Perf. Spec. 1. The permittee shall operate the continuous opacity monitor as a performance indicator to show continuous operation of the pollution control device. If opacity exceeds 20% for more than six consecutive minutes in any 60-minute period, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours may be a violation of the underlying applicable requirement. Report corrective actions and performance indicator deviations in the monthly report. [11,12]	40 CFR 63.864 (c)(1) WAC 173-401-15(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for COMS data recovery.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.B.5	Annual Capacity Factor	10% annual fuel capacity factor, calendar year basis.	Annual average heat input from oil or natural gas fossil fuels shall not exceed 10% of the total heat input on an MMBTU basis. The unit is not subject to NSPS subpart Db if the annual capacity factor remains at or below 10%. Boise shall keep records of heat input calculations which demonstrate that the annual fuel capacity factor is below 10%.	NSPS Subpart Db 40 CFR 60.44b
I.B.6.a	SO_2	1301 tpy, 12-month rolling annual average.	EPA Method 6 or 6C is the primary reference test method. Boise shall perform source tests monthly. Annual average value is calculated using actual emissions from the results of the most recent source tests. Boise shall report monthly all source test results and rolling 12-month mass emissions.[2] Source tests shall be conducted at a production rate which is at or above the average production rate in the previous month.	PSD-01-07 condition 1.1 as BACT avoidance limit for SO_2.
I.B.6.b	SO_2	500 ppmvd at 8% O_2, hourly average.	EPA Method 6 or 6C is the primary reference test method. Boise shall sample monthly consisting of three 1-hour sample runs using Method 6, 6C, or a test method approved in advance in writing by Ecology. Report test results monthly.[2]	PSD-01-07 condition 1.2 and WAC 173-405-040(11)(a) for SO2 limit.
I.B.7	NO_X	112 ppmvd at 8% O_2, daily average. 825 tpy	EPA Method 7, 7A, 7B, or 7E is the primary reference test method. Boise shall monitor continuously using an approved CEM that conforms to 40 CFR Part 60, Appendix B, Performance Specification 2. Report exceedances monthly. [11,13,14]	PSD-01-07 condition 1.3 BACT and PSD-95-04 through Order DE 96-AQI078 for concentration limit. PSD-95-04 through Order DE 96-AQI078 for mass limit. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 and 40 CFR §60.13(e) for CEMS data recovery.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.B.8	CO	500 ppmvd at 8% O_2, 24-hour average. 1355 tpy	EPA Method 10 is the primary reference test method. Boise shall monitor continuously using an approved CEM that conforms to 40 CFR Part 60, Appendix B, Performance Specification 4. Report exceedances monthly. [11,13,14]	PSD-01-07condition1.4 BACT Limit for concentration limit. PSD-95-04 through Order DE 96-AQI078 for mass limit. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 CFR §60.13(e) for CEMs data recovery.
I.B.9.a	TRS	5 ppmvd at 8% O_2, 12-hour average.	EPA Method 16, 16A, or 16B is the primary reference test method. Boise shall monitor continuously using an approved CEM operated in conformance with 40 CFR Part 60, Appendix B, Performance Specification 5. Report monitoring results and exceedances quarterly to Ecology. If the total duration of all 12-hour averaging periods of excess emissions in a quarter is less than 1% of the total number of operating hours (excluding periods of start-up, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement. [11,13]	PSD-01-07 condition1.5, WAC 173-405-040(1)(c) as state–only, not federally enforceable and 40 CFR 60.283(a)(2) for limit. 40 CFR 60.284(a)(2) for CEM. 40 CFR 60.284(e)(1)(i) for excursion allowance. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 and 40 CFR §60.13(e) for CEMS data recovery.
I.B.9.b	TRS	27 tpy, annual average	Annual average value is calculated using an appproved CEM and is operated in conformance with 40 CFR Pt 60 (July 1, 1992), App. B, Perf. Spec. 5. Annually report emissions. [11,13,14]	PSD-95-04 as consolidated in Order DE 96-AQI078. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 and 40 CFR §60.13(e) for CEMS data recovery.
I.B.10	VOC	0.05 lb/MMBTU, hourly average. Source test during the last year of permit term.	Sample consists of one 1-hour test using EPA Method 25A or a test method approved in writing by Ecology once per permit term. The Permittee is required to conduct the test at full load. Report test results with the renewal permit application. The Permittee shall comply with Condition I.B.4.a for O&M requirements intended to indicate compliance with the VOC limit.	PSD-95-04 as consolidated in Order DE 96-AQI078.
I.B.11	VOC	179 tpy annual average.	Annual average value is calculated using actual emissions from previous stack test results. Report test results with the renewal permit application.	PSD-95-04 as consolidated in Order DE 96-AQI078.

C. Lime Kiln

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.C.1.a	HAP (PM as surrogate)	0.064 gr/dscf at 10% O_2 hourly average.	Sample at least once/permit cycle consisting of three – 1-hour test using EPA Method 5 or a test method approved in writing by Ecology.[2] Report test results in the monthly report. The permittee shall comply with Condition I.C.8 for O&M requirements intended to indicate compliance with the particulate limit.	40 CFR 63.862(a)(1)(i)(C) for HAP PM surrogate limit.
I.C.1.b	Particulate	0.066 gr/dscf at 10% O2 when firing natural gas, 0.13 gr/dscf when firing liquid fossil fuel.	EPA RM 5 or a test method approved in writing by Ecology.	40 CFR 60.282(a)(3) for PM limits.
I.C.1.c	Particulate	0.067 gr/dscf @ 10% O2 when firing with natural gas, hourly average. 0.12 gr/dscf @10% O2 when firing fuel oil.	Sample monthly consisting of one 1-hour test using EPA RM 5 or a test method approved in writing by Ecology[2]. Report test results in the monthly report. The Permittee shall comply with Condition I.C.8 for O&M requirements intended to indicate compliance with the particulate limit.	PSD-X-77-04 as consolidated in Order DE 96-AQI078 for basis of particulate limit when firing with fuel oil, 40 CFR 60.282(a)(3)(i) for basis of PM limit when firing with natural gas.
I.C.1.d	Particulate	0.13 gr/dscf @ 10% O2	EPA RM 5 is reference test method.	WAC 173-405-040(3)
I.C.1.e	Particulate	906 lbs/day when firing with fuel oil, 466 lbs/day when firing with natural gas, rolling annual average.	Daily average value is calculated using actual emissions from previous stack test results. Lime kiln particulate tests will be performed on the fuel being fired on the day of the scheduled test. Tests will not be scheduled for the purpose of testing the lime kiln while firing a particular fuel type. Report results in the monthly report.	PSD-X-77-04 as consolidated in Order DE 96-AQI078

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.C.2.a	Opacity	Average 35% for more than six consecutive minutes in any 60-minute period.	EPA Method 9 is the reference test method. The permittee shall comply with Condition I.C.8 for opacity monitoring and reporting requirements intended to indicate compliance with the opacity limit.	WAC 173-405-040(6)
I.C.3.	Reserved			
I.C.4	SO_2	500 ppmvd at 10% O_2, hourly average.	Sample consisting of three 1-hour tests per quarter using EPA Method 6 or a test method approved in writing by Ecology[2]. Report test results quarterly. The permittee shall comply with Condition I.C.8 for O&M requirements to indicate compliance with the SO_2 limit.	WAC 173-405-040(11)(a)
I.C.5	SO_2	5 ppmvd at 10% O_2, rolling annual average.	Sample consisting of three 1-hour test per quarter using EPA Method 6 or a test method approved in writing by Ecology[2]. Report test results quarterly. The permittee shall comply with Condition I.C.8 for O&M requirements intended to indicate compliance with the SO_2 limit.	Order DE 96-AQI078
I.C.6	SO_2	19 lbs/day, rolling annual average.	Daily average value is calculated using actual emissions from previous stack test results. Report test results quarterly in the monthly report.	PSD-X-77-04 as consolidated in Order DE 96-AQI078
I.C.7.a	TRS	8 ppmvd at 10% O_2, 12-hour average.	Sample continuously using EPA Method 16. Report only excursions in the monthly report. [11,13]	Order DE 96-AQ-I078 and 40 CFR 60.283(a)(5) for TRS limit. 40 CFR 60.284(a)(2) for CEM. 40 CFR 60.13(d)(1) for CEM calibration. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR §60.13(e) for CEMS data recovery.
I.C.7.b	TRS	20 ppmvd @ 10% O2 on a daily avg.	EPA Method 16 is reference test method.	WAC 173-405-040(3) for limit.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.C.8.a	Operation	Pressure drop across lime kiln scrubber and scrubber recirculation flow rate to lime kiln must meet the minimum level established during initial performance test-parameter established no later than Sept. 2004, three-hour block average.	Continuously monitor pressure drop and scrubber recirculation rate. Report excursions in monthly, quarterly and semi-annual reports. Pressure drop recorded at least once every 15 minutes at equally spaced intervals, or as an arithmetic or integrated three-hour block average. [11,12,13] Note: Maintain 1-hour scrubber recirculation rate equal or greater than 1000 gpm until completion of initial performance test date.	40 CFR 63.864(a)(2) and 40 CFR 60.284(b)(2)(i) for pressure drop and monitoring accuracy. 40 CFR 63.864(c)(ii) for CA trigger. 40 CFR 64.3 for CAM applicability. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 CFR 63.8(c)(4) for CMS data recovery
I.C.8.b	Scrubber Monitoring	Three-hour block average parameter value is outside the range established in IPT.	Implement corrective action as specified in the Start-up, Shutdown, and Malfunction Plan (SSMP) for any kraft recovery furnace, kraft smelt dissolving tank, kraft lime kiln, or sulfite combustion unit equipped with a wet scrubber when any 3-hour block average parameter value is outside the range of values established in the IPT.	40 CFR 63.864(c)(1)(ii) for CA requirement.
I.C.8.c	Scrubber Monitoring	Six or more monitoring parameter exceedances in a semiannual reporting period.	Sources equipped with a scrubber shall not have six or more monitoring parameter exceedances in a semiannual reporting period on each unit. A unit exceedance day is a 24-hour period in which one or more monitoring parameter exceedance(s) occur(s) on a specific emission unit.	40 CFR 63.864 (c)(2)(iii) for ecursion allowance limitation.

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

I.C.9	TRS	80 ppmvd at 10% O_2 for two consecutive hours.	Sample continuously using EPA Method 16, or equivalent method. Report only excursions in the monthly report. [11,14]	WAC 173-405-040(3)(b) for limit. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and WAC 173-405-077 for CEMS data recovery.

D. No. 2 Smelt Tank

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.D.1.a	PM and HAP (PM as surrogate HAP)	0.2 lbs/ton of black liquor solids (dry weight), hourly average.	Sample monthly consisting of three 1-hour test using EPA Method 5 or a test method approved in writing by Ecology. Report test results in the monthly report.[2] The permittee shall comply with Condition I.D.5 for O&M requirements intended to indicate compliance with the particulate limit.	Order DE 96-AQ-I078 and 40 CFR 60.282(a)(2) for PM limit. 40 CFR 63.862(a)(1)(i)(B) for PM surrogate HAP limit
I.D.1.b	Particulate	0.30 lbs/ton BLS	EPA RM 5 is the reference test method.	WAC 173-405-040(2)
I.D.2	Particulate	71 lbs/day, rolling annual average.	Daily average value is calculated using actual emissions from previous stack test results. Report results in the monthly report.[2]	Order DE 96-AQI078
I.D.3	Opacity	Average 35% for more than six consecutive minutes in any 60-minute period.	EPA Method 9 is the reference test method. The permittee shall comply with Condition I.D.5 for opacity monitoring and reporting requirements intended to indicate compliance with the opacity limit.	WAC 173-405-040(6)
I.D.4.	TRS	0.033 lbs/ton of black liquor solids as H_2S annual average.	Sampling consists of one test per year using EPA Method 16A/6C bag sample or equivalent method. Report test results annually.	40 CFR 60.283(a)(4) and Order DE 96AQI078 for limit.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.D.5.a	Scrubber Monitoring	Pressure drop across SDT scrubber and recirculation flow rate to SDT scrubber must meet the minimum level established during initial performance test parameter established no later than Sept. 2004, three-hour block average.	Continuously monitor pressure drop and recirculation flow. Report excursions in the monthly, quarterly and semi-annual reports. Pressure drop recorded at least once every 15 minutes at equally spaced intervals, or as an arithmetic or three-hour block average. [11,12] Note: Maintain 1-hour scrubber recirculation rate equal or greater than 20 gpm until completion of initial performance test date.	40 CFR 63.864(a)(2) for pressure drop and flow rate monitoring 40 CFR 63.867(c) and 40 CFR 63.10(c) for reporting 40 CFR 63.8(c)(4)(ii) for recording frequency. 40 CFR 63.8(g)(2) for monitored data management requirements. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR §63.8(c)(4) for CMS data recovery.
I.D.5.b	Scrubber Monitoring	Three-hour block average parameter value is outside the range established in IPT.	Implement corrective action as specified in the Start-up, Shutdown, and Malfunction Plan (SSMP) for any kraft recovery furnace, kraft smelt dissolving tank, kraft lime kiln, or sulfite combustion unit equipped with a wet scrubber when any three-hour block average parameter value is outside the range of values established in the IPT.	40 CFR 63.864(c)(1)(ii) for CA requirement.
I.D.5.c	Scrubber Monitoring	Six or more monitoring parameter exceedances in a semiannual reporting period.	Sources equipped with a scrubber shall not have six or more monitoring parameter exceedances in a semiannual reporting period on each unit. A unit exceedance day is a 24-hour period in which one or more monitoring parameter exceedance(s) occur(s) on a specific emission unit.	40 CFR 63.864 (c)(2)(iii) for excursion allowance limitation.

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

I.D.6	Damper position	None.	Record the damper position. Report only bypass periods.	Order DE 96-AQI078

E. No. 3 Smelt Tank

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.E.1.a	HAP (PM as surrogate)	0.2 lbs/ton of black liquor solids, hourly average.	Sample annually consisting of three 1-hour test using EPA Method 5 or a test method approved in writing by Ecology. Report test results in the monthly report. The permittee shall comply with Condition I.E.3 for O&M requirements intended to indicate compliance with the particulate limit	40 CFR 63.862(a)(1)(i)(B) for HAP limit
I.E.1.b	Particulate	0.3 lbs/ton of black liquor solids, hourly average.	Sampling consists of one 1-hour test per month using EPA Method 5 or a test method approved in writing by Ecology. Report test results in the monthly report.[2] The permittee shall comply with Condition I.E.3 for O&M requirements intended to indicate compliance with the particulate limit.	WAC 173-405-040(2) for PM limit.
I.E.2	Opacity	Average 35% for more than six consecutive minutes in any 60-minute period.	EPA Method 9 is the reference test method. The permittee shall comply with Condition I.E.3 for opacity monitoring and reporting requirements intended to indicate compliance with the opacity limit.	WAC 173-405-040(6)
I.E.3.a	Scrubber Monitoring	Pressure drop across SDT scrubber and recirculation flow rate to SDT scrubber must meet the minimum level established during initial performance test parameter established no later than Sept. 2004, three-hour block average.	Continuously monitor pressure drop and recirculation flow. Report excursions in the monthly, quarterly and semi-annual reports. Pressure drop recorded at least once every 15 minutes at equally spaced intervals, or as an arithmetic or three-hour block average. [11,12] Note: Maintain 1-hour scrubber recirculation rate equal or greater than 20 gpm until completion of initial performance test date.	40 CFR 63.864(a)(2) for monitoring requirements 40 CFR 63.864(a)(2) for pressure drop and flow rate monitoring 40 CFR 63.867(c) and 40 CFR 63.10(c) for reporting 40 CFR 63.8(c)(4)(ii) and 40 CFR 63.8(g)(2) for data management requirements. 40 CFR 64.3 for CAM applicability WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR §63.8(c)(4) for CMS data recovery.
I.E.3.b	Scrubber Monitoring	Three-hour block average parameter value is outside the range established in IPT.	Implement corrective action as specified in the Start-up, Shutdown, and Malfunction Plan (SSMP) for any kraft recovery furnace, kraft smelt dissolving tank, kraft lime kiln, or sulfite combustion unit equipped with a wet scrubber when any three-hour block average parameter value is outside the range of values established in the IPT.	40 CFR 63.864(c)(1)(ii) for CA requirement.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.E.3.c	Scrubber Monitoring	Six or more monitoring parameter exceedances in a semiannual reporting period.	Sources equipped with a scrubber shall not have six or more monitoring parameter exceedances in a semiannual reporting period on each unit. A unit exceedance day is a 24-hour period in which one or more monitoring parameter exceedance(s) occur(s) on a specific emission unit.	40 CFR 63.864(c)(1)(iii) for excursion allowance limitation.

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

I.E.4	Damper position	None.	Record the damper position. Report only bypass periods.	Order DE 96-AQI078

F. Hog Fuel Boiler

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.F.1	Particulate	0.04 gr/dscf at 12% CO_2, average of three 1-hour tests.	Sample quarterly consisting of three 1-hour tests using EPA Method 5 or a test method approved in writing by Ecology.[2] Report test results quarterly. The permittee shall comply with Condition I.F.5 for O&M requirements intended to indicate compliance with the particulate limit.	PSD-X-77-04 as consolidated in Order DE 96-AQI078
I.F.2	Particulate	0.2 gr/dscf @7% O_2.	EPA RM 5 is reference test method.	WAC 173-405-040(5)(a) for limit.
I.F.3	Particulate	459 lbs/day, rolling annual average.	Daily average value is calculated using actual emissions from previous stack test results. Report results quarterly.	PSD-X-77-04 as consolidated in Order DE 96-AQI078

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.F.4	Opacity	Average 20% for more than three consecutive minutes in any 60-minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in eight consecutive hours.	EPA Method 9 is the reference test method. The permittee shall comply with Condition I.F.5 for opacity monitoring and reporting requirements intended to indicate compliance with the opacity limit.	WAC 173-400-070(2)(a) for basis of opacity limit
I.F.5	Operation	Minimum operating condition.	Monitor scrubber liquid flow continuously as a performance indicator. Record one-hour averages once every hour. Whenever hourly scrubber liquid flow falls below 800 gpm for greater than one hour, the permittee will, within 24 hours, initiate corrective action to bring the scrubber liquid flow to 800 gpm or greater. Failure to initiate corrective action within 24 hours is a violation of may be a violation of the underlying applicable requirement. Report one-hour average excursions and corrective action in the monthly report. [11,14]	Order DE 96-AQI078 Order 02AQIS-3588 condition 11 rescinds this condition if HF Boiler modifications are completed. WAC 173-401-615(1)(c); and WAC 173-400-105(5)(h) for CMS data recovery.
I.F.6	SO_2	1000 ppm one hour average @ 7% O2.	EPA RM 6 is the reference test method.	WAC 173-405-040(11)(d)

Alternate Operating Scenario:

F2 Emissions Limits and Related Monitoring and Reporting Requirements for Hog Fuel Boiler upon completion of Overfire Air (Not implemented as of 10/1/2004)

Upon the completion of construction and start-up of the Hog Fuel Boiler with over-fire combustion air equipment and associated controls and equipment modifications, Boise shall comply with the emissions limitations, monitoring, and reporting requirements listed in the Table below for the Hog Fuel Boiler. A 180-day testing and break-in period is allowed, after startup, to make any changes or adjustments required to comply with applicable rules and regulations pertaining to air quality and conditions of operation imposed herein.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
2.F.1	Particulate (PM/PM_{10})	0.026 gr/dscf at 7% O_2, average of three 1-hour tests.	Sample quarterly consisting of three 1-hour tests using EPA RM 5 or a test method approved in writing by Ecology. Report test results quarterly.[2]	Order DE 02AQIS-3588
2.F.2	Particulate (PM/PM_{10})	77 tons/year, 12-month rolling annual average.	EPA Method 5 is the reference test method. Annual average value is calculated using actual emissions from the most recent stack test results from Condition 2.1 above. Report test results monthly.[2]	Order DE 02AQIS-3588 limiting PM/PM_{10} to past actual emissions
2.F.3	Opacity	20% for up to 15 consecutive minutes in any eight hours.	EPA Method 9 is the reference test method. Ongoing comopliance assessed by visual emissions observations. If visible emissions are greater than 20%, Boise shall, within 24 hours, initiate corrective action to reduce visible emissions. Failure to initiate corrective action may be a violation of the underlying applicable requirement. Document and report any excursion and corrective actions monthly.	WAC 173-400-070(2)(a) for limit.
2.F.4	SO_2	102 tons/year, 12-month rolling annual average.	The permittee shall record time of combustion of low-volume, high-concentration (LVHC) noncondensable gas (NCG). The combustion shall not exceed 1,200 hours per year. Report the hours of combustion with semiannual MACT reporting requirements.	Order DE 02AQIS-3588.
2.F.6	NO_X	0.254 lb/MMBtu 30-day rolling average. 0.30 lb/MMBtu	EPA Method 7, 7A, 7B, or 7E is the reference test method. Boise shall install, calibrate, maintain, and operate a continuous monitoring system to monitor NO_X from the HFB. Monitor continuously using an approved CEM that conforms to 40 CFR Part 60, Appendix B, Performance Specification 2. CEM data shall be averaged over a rolling 30-day period. Report monitoring results and exceedances semiannually to the Administrator (Ecology) as required by 40 CFR 60.49b(w). [11,13,14]	PSD-01-07 condition 2.1 for 0.254 lb/MMBtu limit. 40 CFR 60.44b for 0.30 lb/MMBtu limit WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR §60.13(e) for CEMS data recovery.
2.F.7	CO	500 ppmvd at 7% O_2, 12-month rolling annual average.	EPA Method 10/10B is the primary reference test method. Source test monthly consisting of three 1-hour sample runs using a modified Ecology Method 10/10B (Tedlar bag method). Annual average is calculated from monthly test results. [2] Report results monthly.	PSD-01-07 condition 2.2 WAC 173-401-615(1)(c) WAC 173-400-105(5)(h) 40 CFR §60.13(e) for CEM downtime

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
2.F.8.a	Operation	Minimum operating condition for CO process monitoring.	Maintain a continuous process combustion CO monitor at the boiler outlet and monitor in-process CO concentration as a performance indicator. Whenever CO concentration at the boiler outlet is in excess of 2,000 ppmvd (7% O_2) for more than 24 hours, Boise shall, within 24 hours, initiate corrective action to reduce in-process CO concentration. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Boise shall report 24-hour average in-process CO concentration in excess of 2,000 ppmvd (7% O_2) and corrective action on a monthly basis.[11,14]	PSD-01-07 condition 2.3 WAC 173-401-615(1)(c); and WAC 173-400-105(5)(h) for CMS data recovery.
2.F.8.b	Operation	Minimum operating condition for bypassing ESP when firing natural gas exclusively.	Maintain ESP bypass valves in closed position during wood waste firing. Monitor and record the positions of ESP bypass valves at all times. Boise shall report monthly all bypass periods and the type of fuel fired during bypass period.	PSD-01-07 condition 2.4
2.F.5	Operation	Minimum operating condition.	Maintain ESP bypass valves in closed position during wood waste firing. Monitor and record the positions of ESP bypass valves at all times. Report monthly all bypass periods and the type of fuel fired during bypass period.	Minimum operating condition for bypassing control devicewhen firing natural gas exclusively.

G. No. 1 Power Boiler

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.G.1	Particulate	0.1 gr/dscf at 7% O_2, hourly average.	Based on calculations for maximum emissions, this boiler cannot exceed the grain loading limit when firing natural gas or fuel oil. Sulfur content limit of ≤ 2% for fuel oil is intended to indicate compliance with the particulate standard. Permittee shall keep records of receipts showing all oil fired is ≤ 2% sulfur.	WAC 173-405-040(5)(c)
I.G.2		229 lbs/day, annual average.	Based on calculations for maximum emissions, this boiler cannot exceed the mass loading limit when firing natural gas. When firing with fuel oil, pounds per day average value is calculated using emission factor from EPA's AP-42 (9/98) with fuel oil of ≤ 2% sulfur. Report emissions annually.	Order DE 96-AQI078

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.G.3	SO_2	3025 lbs/day, annual average.	Based on calculations for maximum emissions, this boiler cannot exceed the SO_2 mass loading limit when firing natural gas. Fuel oil may be fired at any time in the No. 1 Power Boiler, subject to the stated mass loading limit. Boise shall report emissions annually. Fuel oil fired cannot exceed ≤ 2% sulfur content by weight. Maintain fuel receipts showing that all fuel oil fired is ≤ 2% sulfur.	Order DE 96-AQI078

The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

I.G.4	SO_2	1000 ppm one hour average @ 7% O2.	EPA RM 6 is reference test method.	WAC 173-405-040(11)(d)

I.G.5	SO_2	8750 lbs/day from No. 1 and No. 2 power boilers combined, daily average.	Based on calculations for maximum emissions, the boilers cannot exceed the combined mass loading limit when exclusively firing natural gas. When firing with fuel oil, daily average value is calculated using emission factor from AP-42 (9/98) with fuel oil of ≤ 2% sulfur. Fuel oil fired cannot exceed ≤ 2% sulfur content by weight. Report emissions in the monthly report. Maintain fuel receipts showing that all fuel oil fired is ≤ 2% sulfur.	Order DE 96-AQI078
I.G.6	SO_2	1104 tpy from No. 1 and No. 2 power boilers combined, annual average.	Based on calculations for maximum emissions, the boilers cannot exceed the combined mass loading limit when exclusively firing natural gas. When firing with fuel oil, annual average value is calculated using emission factor from AP-42 (9/98) with fuel oil of ≤ 2% sulfur. Fuel oil fired cannot exceed ≤ 2% sulfur content by weight. Report emissions in the monthly report. Maintain fuel receipts showing that all fuel oil fired is ≤ 2% sulfur.	Order DE 96-AQI078

H. No. 2 Power Boiler

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.H.1	Particulate	0.1 gr/dscf at 7% O_2, hourly average.	Based on calculations for maximum emissions, this boiler cannot exceed the grain loading limit when firing natural gas or fuel oil. Compliance is demonstrated through normal operation. Maintain records of type of fuel used.	WAC 173-405-040(5)(c)

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.H.2	SO_2	1000 ppm one hour average @ 7% O2.	EPA RM 6. Compliance indicated by use of < 2% S in fuel oil fired.	WAC 173-405-040(11)(d)

The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

I.H.3	SO_2	≤ 2% sulfur in fuel oil fired.	Fuel oil fired cannot exceed ≤ 2% sulfur content by weight. Maintain fuel receipts showing that all oil fired is ≤ 2% sulfur.	Order DE 96-AQI078
I.H.4	SO_2	8750 lbs/day from No. 1 and No. 2 power boilers combined, daily average.	Based on calculations for maximum emissions, the boiler cannot exceed the limit when firing exclusively natural gas. When firing with fuel oil, daily average value is calculated using emission factor from AP-42 (9/98) with fuel oil of ≤ 2% sulfur. Fuel oil fired cannot exceed ≤ 2% sulfur content by weight. Report emissions in the monthly report. Maintain fuel receipts showing that all fuel oil fired is ≤ 2% sulfur.	Order DE 96-AQI078
I.H.5	SO_2	1104 tpy from No. 1 and No. 2 power boilers combined, annual average.	Based on calculations for maximum emissions, the boiler cannot exceed the limit when firing exclusively natural gas. When firing with fuel oil, annual average value is calculated using emission factor from AP-42 (9/98) with fuel oil of ≤ 2% sulfur. Fuel oil fired cannot exceed ≤ 2% sulfur content by weight. Report emissions in the monthly report. Maintain fuel receipts showing that all fuel oil fired is ≤ 2% sulfur.	Order DE 96-AQI078

I. No. 1 and No. 2 M&D Digesters; No. 1 and No. 2 Evaporator Sets; and Concentrators

The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.I.1	TRS	Treat all collectible noncondensable gas (NCG) to reduce TRS emissions equal to reduction achieved by thermal oxidation in a lime kiln.	Record the number of hours that NCGs generated were not combusted each month. Report periods of such noncombustion monthly. Periods of noncombustion arising from the need to prevent loss of life or limb are not subject to this requirement and need not be considered in determining total monthly periods of noncombustion. Continuously monitor pressure differentials throughout collection system.[11,14]	WAC 173-405-040(4) WAC 173-401-615(1)(c); WAC 173-400-105(5)(h) for CMS data recovery.

J. KAMYR Digester and No. 3 Evaporator Set

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.J.1	TRS	Combust collectible noncondensable gas (NCG) at a minimum temperature of 1,200ºF for at least 0.5 seconds.	Record all periods during which NCGs generated were not combusted. Report periods of such noncombustion monthly. By intrinsic design, the NCG incineration units (Hog Fuel Boiler and Lime Kiln) meet the temperature and residence time requirements.[11,14]	40 CFR 60.283(a)(1)(iii) WAC 173-401-615(1)(c); WAC 173-400-105(5)(h) for CMS data recovery.

The following **state-only** rrequirement is not federally enforceable nder the federal Clean Air Act:

I.J.2	TRS	Treat all collectible noncondensable gas (NCG) to reduce TRS emissions equal to reduction achieved by thermal oxidation in a lime kiln.	Record the number of hours that NCGs generated were not combusted each month. Report periods of such noncombustion monthly. Continuously monitor pressure differentials throughout collection system.[11,14]	WAC 173-405-040(4) 40 CFR 64.3 for CAM applicability. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h) for CMS data recovery.

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K. Chlorine Dioxide Generation Unit

The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.K.1	Chlorine and chlorine dioxide from R8 Vent Gas Scrubber	Maximum chilled water temperature of 50°F, hourly average.	Monitor new No. 3 (York) Chiller chilled water temperature continuously as a performance indicator. If chilled water temperature exceeds 50°F based on an hourly average, permittee will take corrective action within 72 hours. Report only excursions in the monthly report.[11,14]	Order DE 96-AQI078 WAC 173-401-615(1)(c); WAC 173-400-105(5)(h) for CMS data recovery.
I.K.2	Chlorine and chlorine dioxide from R8 Tail Gas Scrubber	Scrubbing liquid pH at minimum of 10.0, hourly average.	Monitor scrubber pH continuously as a performance indicator. If scrubbing liquid pH falls below 10.0 based on an hourly average, permittee will take corrective action within 72 hours. Report only excursions in the monthly report.[11,14]	Order DE 96-AQI078 WAC 173-401-615(1)(c); WAC 173-400-105(5)(h) for CMS data recovery
I.K.3		Scrubbing liquid volumetric flow rate, hourly average.	Maintain the recirculation scrubbing liquid flow at the minimum at 50 gallons per minute as a performance indicator. If scrubbing liquid flow rate falls below 50 gallons per minute based on an hourly average, permittee will take corrective action within 72 hours. Report only excursions in the monthly report.[11,14]	Order DE 96-AQI078 WAC 173-401-615(1)(c); WAC 173-400-105(5)(h) for CMS data recovery

L. Cyclone Box Clipping Collection System

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.L.1	Particulate	0.17 tpy, annual average.	The permittee shall provide quarterly inspection of the cyclone when the unit is in operation. Inspection log shall be maintained and made available for inspection by Ecology. When the cyclone malfunctions, the permittee will initiate corrective action within 24 hours. Failure to initiate corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report excursions and corrective action in the monthly report.	Order DE 96-AQI078 for particulate 40 CFR 64.3 for CAM applicability.

M. Bleach Plant

Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.M.1.a	Total chlorinated HAP (not including chloroform)	No visible defects in enclosure openings and closed vent system components.	Perform monthly visual inspection of each enclosure opening and closed-vent system component as specified in 40 CFR 63.453(k). If an inspection identifies visible defects or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken. Make a first effort to repair or correct the closed vent system as soon as practicable, but no later than five calendar days after the problem has been identified. Complete the repair or corrective action no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if it is determined that the emissions resulting from the immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.	40 CFR 63.453(k)(1) and (2) for monthly visual inspection. 40 CFR 63.453(k)(6) for CA. 40 CFR 63.453(b)(ii) for repair requirements.
I.M.1.b	Total chlorinated HAP (not including chloroform)	Enclose, collect, and treat all gases vented from each bleaching stage where chlorinated compounds are introduced (D_0, D-1, and D-2 stage equipment).	Record all periods during which bleach plant vent gases were not collected and treated each month. Report periods of such nontreatment monthly.[11,12]	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.445(b) for chlorinated HAP management requirements. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 CFR 63.8(c)(4) for CMS data recovery
I.M.1.c	Total chlorinated HAP (not including chloroform)	Treat bleach plant vent gases to achieve a scrubber outlet concentration of 10 parts per million or less by volume as measured as Chlorine.	Operation of the scrubber outside the range established for operating parameter values shall constitute a violation of the applicable emission standard and shall be reported as excess emissions in the monthly report.	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.445(c) for HAP limit.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.M.2.a	Operation	Minimum operating condition.	Monitor scrubber fan motor function continuously as a performance indicator. If fan motor ceases operation as indicated by motor function based on a three-hour block average, permittee will initiate corrective action within 24 hours. Report only excursions in the monthly report. [11,12]	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.453(m) for alternate operating parameter. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for CMS data recovery.
I.M.2.b	Operation	Minimum operating condition.	Monitor scrubber medium ORP continuously as a performance indicator. If scrubbing medium ORP minimum operating parameter is not maintained, based on a three-hour block average, permittee will initiate corrective action within 24 hours. Report only deviations and corrective actions in the monthly report. [11,12]	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.453(m) for alternate operating parameter. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for CMS data recovery.
I.M.2.c	Total chlorinated HAP (as chlorine)	Minimum operating condition.	Maintain the recirculation scrubbing liquid flow above the established minimum operating parameter value as a performance indicator. If scrubbing liquid flow rate falls below the established minimum flow rate based on a three-hour block average, permittee will initiate corrective action within 24 hours. Report only deviations and corrective actions in the monthly report. [11,12]	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.453(m) for alternate operating parameter. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); 40 CFR 63.8(c)(4) for CMS data recovery.
I.M.3	Total chlorinated HAP (as chlorine)	Collect all gases vented from each bleaching stage where chlorinated compounds are introduced (D_0, D-1, and D-2 stage equipment).	Conduct annual performance test on negative pressure closed-vent system using procedures specified in 40 CFR 63.457(e). Report test results within 60 days of conducting test. Perform monthly visual inspection of closed-vent system components as specified in 40 CFR 63.453(k).	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.445(b) for chlorinated HAP management requirement. 40 CFR 63.453(k) for monthly visual inspection.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.M.4	Chloroform	The permittee shall use no hypochlorite or chlorine for bleaching in the bleaching systems or line.	Report only deviations and corrective actions in the monthly report.	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.445(d) for effluent limitation.

N. LVHC Collection and Incineration System (includes KAMYR Digester, NSSC Digester, and No. 1 and No. 2 M&D Digesters; No. 1, No. 2, and No. 3 Evaporator Sets and Concentrators; and Foul Condensate Collection Tank)

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.N.1	Total HAP emissions	Enclose, collect, and treat all vent gases from LVHC equipment systems.	Record all periods during which LVHC gases were not collected and treated each month. Report periods of such nontreatment monthly.	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.443(c) for HAP management requirement.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.N.2	Total HAP emissions	Collect LVHC gases in closed-vent system.	Conduct annual performance tests on closed-vent systems using the referenced procedures annually. Report test results within 60 days of conducting performance test. Perform monthly visual inspection of closed-vent system components as specified in 40 CFR 63.453(k)	WAC 173-400-075(5) incorporates MACT by reference. 40 CFR 63.443(c) for HAP management requirement. 40 CFR 63.453(k) for monthly visual inspection.
I.N.3	Total HAP emissions	Treat LVHC vent gases to reduce total HAP emissions using hog fuel boiler, lime kiln, by introducing the HAP emission stream with the primary fuel or into the flame zone.	Record all periods during which LVHC gases are combusted in each control device. Report periods during which LVHC gases are vented to the atmosphere before control in the monthly report. Venting of LVHC gases from main bypass vent valves for periods in excess of 1% of total operating time (excluding periods of start-up, shutdown, or malfunction) shall constitute a violation of the applicable emission standard. [11,12]	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.443(d)(4) for HAP management options and specifications. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for CMS data recovery.

O. Pulping Condensate Collection and Treatment System (includes KAMYR Digester; No. 1 and No. 2 M&D Digesters; No. 1, No. 2, and No. 3 Evaporator Sets; and LVHC and Foul Condensate Collection Tanks)

Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.O.1	Total HAP emissions	Enclose, collect, and convey pulping condensates from the identified equipment systems to the wastewater treatment plant.	Manage, inspect, maintain records and conduct repairs as necessary**.** Record all periods during which identified condensate streams were not collected or treated each month, and conduct monthly closed-collection system inspections.	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.960-966 for hard piping management requirements. 40 CFR 63.446(b) for tie in to 40 CFR 63.960-962
I.O.2	Total HAPs collected	Collect condensates from the applicable equipment systems named such that the total collected HAP mass contains 11.1 pounds or more per ton of oven-dry pulp (for mills that perform bleaching).	Record kraft pulp production (in oven-dry tons of unscreened brownstock) and volumetric flow rates for each condensate stream collected on a daily basis. On a daily basis, calculate the following: (a) Total HAP collected using the HAP emission factors from the initial condensate characterization study and the daily volumetric flows of collected condensate streams. (b) Total HAP collected during the previous 15-day period. (c) Total kraft pulp production during the previous 15-day period. (d) Total HAP per ODTP by dividing total HAP collected during -day period by the total kraft pulp production during the 15-day period. Composite samples shall be analyzed for total HAP using EPA Method 305, NCASI DI/MeOH 94.02, or an alternative method approved by EPA.	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.446(b) specifies equipment systems for collection requirement.,(c)(3) specifies HAP collection requirement,(e)(2) for CCA.
I.O.3	Total HAPs collected	Collect at least 11.1 lbs of HAP per oven-dry ton of unscreened kraft brownstock, 15-day rolling average.	Maintain the collected HAP mass above the minimum 11.1 lbs/ODTP as a performance indicator. If collected HAP mass falls below 11.1 lbs/ODTP based on a 15-day rolling average, permittee will initiate corrective action within 24 hours. Report only deviations and corrective actions in the monthly report.	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.446(c) for HAP collection number. 40 CFR 63.453 (m) and (n) for CCA surrogate performance indicator requirements.

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.O.4	Total HAPs treated	Treat collected pulping condensates to achieve the following: At mills that perform bleaching, treat the pulping process condensates to remove 10.2 or more pounds of HAP per ton of oven-dry pulp.	Obtain daily inlet and outlet liquid grab samples from the effluent lagoon. Record inlet liquid flow and nominal applied aerator horsepower and blower horsepower. Perform the percent reduction test procedure specified in 40 CFR 63.457(l) on a quarterly basis thereafter within 45 days after the beginning of each quarter. Report test results within 60 days of conducting percent reduction test. The permittee shall comply with conditions I.O.5 and I.O.6 for minimum O&M requirements intended to indicate compliance with the limit for treating HAP in the pulping condensates. Operation below minimum operating parameter values shall require the permittee to perform the percent reduction test procedure specified in 40 CFR 63.457(l). Report only excursions determined from the percent reduction test procedure in the monthly report. To establish or re-establish the value for each operating parameter required to be monitored by I.O.5 and I.O.6, the permittee shall use the procedures described in 40 CFR 63.453(n). [9]	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.446(e) for treatment options. 40 CFR 63.453(j) for monitoring and performance testing, (n) for operating parameter requirements, (p) for operating parameter excursion specifications.
I.O.5	Total HAPs treated	Minimum operating condition.	If the 15-day rolling average condensate treatment falls below 10.2 lbs per ton kraft pulp, permittee will perform the percent reduction test procedure specified in 40 CFR 63.457(l) as soon as practical. [9]	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.453(j) for performance parameter requirements and (p) for performance parameter excursion specification.
I.O.6	Performance parameter	Minimum operating condition.	Maintain the total aerator horsepower days above the established minimum aerator horsepower days as a performance indicator. If total aerator horsepower days fall below the established minimum parameter value based on a 15-day rolling average, permittee will perform the percent reduction test procedure specified in 40 CFR 63.457(l) as soon as practical. [9]	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.453(j) for performance parameter requirements and (p) for performance parameter excursion specification.

P. Clean Condensate Alternative (CCA)

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.P.1	Total HAP emissions	Reduce HAP emissions (as methanol) at the levels established in the CCA.	Report periods of condensate non-collection for the CCA for periods in excess of 4% of total operating time (excluding periods of start-up, shutdown, or malfunction) shall constitute a violation of the applicable emission standard.	40 CFR 63.443(e)(2) for excess emission allowance.
I.P.2.a	Total HAP emissions	Perform IPT	Permittee will perform an IPT which will establish both HAPs' collection and destruction parameters [10]	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.443(c) for HAP control requirement and 40 CFR 63.447 for CCA alternative.
I.P.2.b	Total HAP emissions	The Wallula CCA requires the mill to enclose, collect, and convey pulping condensates from the identified equipment systems to the wastewater treatment system as an approved alternative to HVLC controls. Discharge the pulping process condensate below the liquid surface of a biological treatment system that reduces or destroys total HAPs.	Permittee will establish levels of collection and biodegradation of HAPs (as methanol) in the wastewater treatment plant during the CCA initial performance test. Report test results within 60 days of conducting a performance test.	WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.443(c) for HAP control requirement. 40 CFR 63.453(k) for enclosure and closed vent system management requirements. 40 CFR 63.447 for CCA alternative.
I.P.3	HAP CCA Operational Parameter	Establish the level of over-collection required to meet the CCA requirements of 40 CFR 63.447 proposed in the Wallula CCA plan.	Maintain the collected HAP mass above the minimum as outlined in the CCA as a performance indicator. If collected HAP mass falls below the established minimum, based on a 15-day average, permittee will initiate corrective action within 24 hours. Report only deviations and corrective actions in the monthly report. [10]	40 CFR 63.447 for CCA alternative

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.P.4	HAP CCA Operational Parameter	Confirm operational parameter	Obtain daily inlet and outlet liquid composite BOD_5 and COD samples from the effluent lagoon. Record inlet liquid flow and nominal applied aerator horsepower and blower horsepower. [10]	40 CFR 63.447 for CCA alternative. 40 CFR 63.453(j) for sampling. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for CMS data recovery.
I.P.5	HAP CCA Operational Parameter	Permittee shall not use segregated condensate on brownstock washers or deckers.	Permittee shall continuously monitor segregated condensate collection status to demonstrate that condensates are not used in brownstock washers or deckers and certify once per year that segregated condensate will not be used in brownstock washers or deckers. [10,11,12]	40 CFR 63.447(b)-(h) for CCA alternative requirements. WAC 173-401-615(1)(c); WAC 173-400-105(5)(h); and 40 CFR 63.8(c)(4) for CMS data recovery.
I.P.6	Reserved			
I.P.7 a.	HAP CCA Operational Parameter	Recordkeeping	Permittee shall maintain all CCA compliance demonstration records, testing, and reporting for a period not less than five years.	40 CFR 63.10 (b) for record review.
I.P.7 b	HAP CCA Operational Parameter	IPT Plan submittal date	Permittee will submit an IPT plan for approval by Ecology at least 60 days prior to execution. [10]	40 CFR 63.9(e) for approval review.
I.P.7 c	HAP CCA Operational Parameter	IPT implementation date	Permittee will execute IPT plan and submit results to Ecology within 60 days of the completion of the IPT. Permittee will execute IPT no later than April 17, 2006. [10]	40 CFR 63.7(g) for reporting deadline
I.P.7 d	HAP CCA Operational Parameter	Confirm over collection	Permittee shall perform the IPT to confirm that collected and treated condensate methanol levels are not less than 35% below initial levels proposed in the CCA emissions study and contained in the mill's CCA final proposal. [10]	40 CFR 63.447 for CCA
I.P.7 e	HAP CCA Operational Parameter	Conditional compliance demonstration	If the IPT results were more than 35% below initial levels proposed in the CCA emissions study and contained in the mill's CCA final proposal, the mill shall again conduct testing of HVLC vent emission points and complete and submit a CCA methanol emissions study to demonstrate compliance with the CCA regulation. This study shall serve as the mill's demonstration of compliance.	40 CFR 63.447 for CCA
I.P.7 f	HAP CCA Operational Parameter	Condensate over-collection.	The permittee shall investigate, take corrective action, and retest if the 15-day rolling average of condensate collection (lbs methanol per ton of kraft pulp) falls below the threshold established in the IPT.	40 CFR 63.447 for CCA

Q. **Landfill/Compost Operation**

	Parameter	Limit & Averaging Period (shall not exceed)	Monitoring & Reporting[1]	Applicable Requirement(s)
I.Q.1	Particulate-fugitive dust	Minimum Operating condition	The permittee shall comply with Landfill/Compost Dust control plan after the implementation date specified in the order establishing the dust control plan. This order is part of the SIP maintenance plan for the local air shed.	Order No. 1614-AQ04

NESHAPS Startup, Shutdown, and Malfunction (SSM) requirements. See the emission unit specific section of the permit for emission unit applicability. [40 CFR 63.6(e)(3)(e)]

1. The Permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the LVHC System during SSM periods, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with 40 CFR 63 Subparts S & MM standards. The SSM plan shall include the elements set forth in 40 CFR 63.6(e)(3). [40 CFR 63.6(e)(3)(i), 4/5/02]

2. During SSM periods, The Permittee shall operate and maintain the pulping process condensates system (including associated air pollution control equipment) in accordance with the SSM plan. Malfunctions shall be corrected as soon as possible after their occurrence in accordance with the SSM plan, 40 CFR 63.6(e)(3)(ii). [4/5/02]

3. The Permittee shall change the SSM plan if required by Ecology if it is determined to be unacceptable under 40 CFR 63.6(e)(2). [40 CFR 63.6(e)(3)(vii),4/5/02]

4. The Permittee shall update the SSM plan within 45 days of an SSM event that the plan failed to address or inadequately addressed. [40 CFR 63.6(e)(3)(viii), 4/5/02]

FACILITY-WIDE GENERAL REQUIREMENTS [WAC 173-401-600]

These generally applicable requirements apply facility-wide, including insignificant emission units or activities. Insignificant emission units or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements.

1. Varying Emission Rate. The permittee cannot vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed according to air pollution episode regulations. [WAC 173-400-205]

2. Detrimental Emissions. The permittee shall not cause or permit emission of any contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [WAC 173-400-040(5)]

3. Concealment and Masking. The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit. [WAC 173-400-040(7)]

4. Fugitive Emissions. The permittee shall take reasonable precautions to prevent the release of air contaminants from emission units engaged in material handling, construction, demolition, or any other operation that is a source of fugitive emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(3)(a)]

5. Fugitive Dust. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and maintain and operate the source to minimize emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(8)(a)]

6. Particulate Matter Deposition. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: No deposit of particulate matter beyond property line so as to interfere unreasonably with use and enjoyment. [WAC 173-400-040(2)]

7. Odors. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: Any person causing odor which may unreasonably interfere with use & enjoyment of property must use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(4)]

8. Opacity. The permittee may not cause or allow the emission of a plume from any emission unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than 20% for more than 6 consecutive minutes in any 60 minute period except as provided in WAC 173-405-040(6). [WAC 173-405-040(6)]

9. Complaints. Except where specific requirements are defined elsewhere, the permittee shall assure compliance with conditions 1 through 8 by recordkeeping of actions taken by the permittee in response to complaints received by the permittee or of possible noncompliance noticed by the facility staff in day to day operations. The permittee shall assess the validity of each complaint and commence corrective action, if warranted, as soon as possible but no later than 3 working days of receiving the complaint. The permittee shall keep records of the following: complaints received; the assessment of validity; and what, if any, corrective action is taken in response to the complaint. [WAC 173-401-630]

10. Sulfur Dioxide Emissions. The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed 1,000 parts per million for an hourly average, corrected to 7% oxygen for combustion units. [WAC 173-405-040(11)]

11. Reserved

12. Good Air Pollution Control Practice. The permittee shall at all times, including periods of abnormal operation and upset conditions, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [WAC 173-405-040(10)]

13. Chemical Accidental Release Program. This stationary source, as defined in 40 CFR Part 68.3, is subject to part 68, the accidental release prevention regulations. This stationary source shall submit a risk management plan (RMP) by date specified in section 68.10. This stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR part 70 or 71. [40 CFR Part 68.3]

14. Stratospheric Ozone Protection.
    a. The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditions (MVACs) in Subpart B:
        i. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
        ii. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
        iii. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to § 82.161.
        iv. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166 ("MVAC-like appliance" is defined at § 82.152.)
        v. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
        vi. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances pursuant to § 82.166.
    b. Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SANP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]
    c. Any certified technician employed by Permittee shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]
    d. The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. [RCW 7070.94.970(2), 970(4)] State Only
    e. Compliance with this term and condition will be demonstrated by using a certified contractor or employee.

    [40 CFR Section 82 and RCW 70.94.970 (the RCW is a **state-only** requirement)]

15. Insignificant Emission Units. The generally applicable requirements that apply to IEUs are, WAC 173-405-040(5), WAC 173-400-040, WAC 173-400-050(1) & (3), and WAC 173-400-060. [WAC 173-401-530(2)(b)]

16. Volatile Organic Liquid Storage Vessels. The Permittee shall keep records showing the dimensions, capacities, and vapor pressure of contents of all storage vessels having capacities greater than or equal to 75 cubic meters or vapor pressure of contents greater than or equal to 3.5 kPa that are used to store volatile organic liquids and for which construction, reconstruction, or modification commenced after July 23, 1984. These records are to be kept for the life of each storage vessel. [40 CFR 60.116b (a) and (b)]

17. Used Oil Burning. The following condition is **state-only** and is not federally enforceable under the Clean Air Act. The permittee can burn used oil only if it meets the standards prescribed in RCW 70.94.610(1). [RCW 70.94.610]

18. Asbestos. The permittee shall comply with the applicable requirements of 40 CFR Part 61, subpart M (asbestos NESHAP) and WAC 173-400-075 when conducting any renovation or demolition at the facility. [WAC 173-400-075]

MONITORING, RECORDKEEPING & REPORTING

Monitoring Requirements [WAC 173-401-630(5)(b).]

19. Unit-Specific Requirements. The permittee shall conduct routine monitoring of emissions in accordance with the program of monitoring or testing required by specific emission unit conditions of this permit. [WAC 173-405-072].

20. Unavoidable Excess Emissions. This condition applies, where applicable, to excess emissions that are claimed to be unavoidable pursuant to WAC 173-400-107. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107. The permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are excused and are not subject to penalty. [WAC 173-400-107]

21. Violation Duration. A violation of an emission limit is presumed to commence at the time of the testing, recordkeeping or monitoring indicating noncompliance, and to continue until the time of retesting, recordkeeping or monitoring that indicates compliance. This presumption may be defeated if credible evidence shows that the violation was of longer duration, that there were intervening days during which no violation occurred or that the violation was not continuing in nature. [42 U.S.C. 7413(e)(2)]. The permittee may conduct monitoring or testing more frequently than required by this permit.

22. Insignificant Emission Units. The permittee is not subject to any testing, monitoring, reporting, or recordkeeping for the insignificant emission units or activities listed. [WAC 173-401-530(2)(c)]

Recordkeeping Requirements

23. Monitoring Records. The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:
    a. The date, place as defined in requirement, and time of sampling or measurement;
    b. The date(s) analysis were performed;
    c. The company or entity that performed the analysis;
    d. The analytical techniques or methods used;
    e. The results of such analysis; and
    f. The operating conditions existing at the time of sampling or measurement.
    [WAC 173-401-615(2)(a); WAC 173-400-105

24. Inspection Checklists. Where the permittee is required to use and maintain an inspection checklist, the checklist must contain, at a minimum, the following information:
    a. The person conducting the inspection;
    b. The date/time of the inspection;
    c. Location of the inspection;
    d. The observations made during the inspection;
    e. Corrective actions taken if any; and

f. The date and time corrective action was initiated and completed.
[WAC 173-401-615(1)(b)]

25. Changes at Source. The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-724(5).]

26. Records Retention. The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all data from continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2)(c)]

27. Recording Permit Deviations. The permittee shall maintain a contemporaneous record of any deviation from the requirements of this permit. [WAC 173-401-615(3)(b).]

Reporting Requirements [WAC 173-401-520, -615(3), & -710]

28. Unit Reporting Requirements. In addition to any emission unit specific reporting requirements identified below, emission unit specific reporting requirements are identified in specific emission unit conditions of this permit.

29. Production Reporting. Report within 15 days of the end of each month average daily production of air-dried unbleached pulp. [WAC 173-405-072(4)]

30. Monthly Reports. Monitoring reports required by this permit must be submitted to Ecology within 15 days of the end of each calendar month. [WAC 173-405-072]. The reports must clearly identify all instances of deviations from permit requirements. [WAC 173-401-615(3)(a)]

31. Emission Inventory. The permittee shall submit an inventory of emissions, as specified in WAC 173-405-078, from the source each year no later than 105 days after the end of the calendar year. The permittee shall maintain records of information necessary to substantiate any reported emissions. [WAC 173-405-078 and WAC 173-400-105(1)]

32. Permit Deviations/Excess Emissions. The permittee shall promptly submit a report of any deviations from permit conditions.
    a. For purposes of this permit, submitting a report “promptly” means the following: (1) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (2) for other deviations, “promptly” means that the deviations are identified in the respective monthly report.
    b. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.
    [WAC 173-401-615(3)(b) and WAC 173-400-107]

33. Certifications. Any application form, report, or compliance certification submitted pursuant to Chapter 173-401 WAC shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 173-401 WAC shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520]

34. Report Address. All reports, renewal applications, and compliance certifications required by this permit shall be submitted to:

Department of Ecology
Industrial Section
P.O. Box 47706
Olympia, WA 98504-7706

Compliance certification shall also be submitted to:

Environmental Protection Agency
Air Operating Permits, Region 10
1200 Sixth Avenue, OAQ-108
Seattle, WA 98101-1128

35. Compliance Requirements/Certification.

a. The permittee shall continue to comply with applicable requirements with which the permittee is in compliance [WAC 173-401-510(2)(h)(ii)(A)];

b. The permittee shall meet applicable requirements that will become effective during the permit period on a timely basis[WAC 173-401-510(2)(h)(ii)(B)];

c. The Permittee shall submit a report to the Department of Ecology and to EPA Region X within 105 days after the close of the calendar year, and every year thereafter, certifying compliance with the terms and conditions contained in this permit for the previous calendar year. A report filed in a format approved by Ecology is deemed to meet the requirements of this condition. The initial compliance certification shall cover the period from when the permit is effective to the end of the calendar year. The certification shall describe the following:

i. The permit term or condition that is the basis of the certification;
ii. The compliance status;
iii. Whether compliance was continuous or intermittent; and
iv. The methods used for determining compliance. [WAC 173-401-630(5)]

The compliance status shall be based on compliance with the final averaging period of the annual certification period. Determination of continuous or intermittent compliance (condition 37c.) shall be based on compliance during the entire annual certification period.

d. The permittee is not required to certify compliance for insignificant emission units or activities. **[WAC 173-401-530(2)(d)]**

STANDARD TERMS & CONDITIONS

36. Duty to Comply. The permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a)]

37. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]

38. Permit Actions. This permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c)]

39. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]

40. Duty to Provide Information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]

41. Permit Fees. The permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW. [WAC 173-401-620(2)(f)]

42. Emissions Trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g)]

43. Severability Clause. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]

44. Permit Appeals. The permittee may appeal this permit or any conditions in it only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA. [WAC 173-401-620(2)(i)]

45. Permit Continuation. This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]

46. Application and Issuance of a Renewal Permit. The permittee shall submit a complete permit renewal application to Ecology no later than six months, but no earlier than 18 months, prior to the expiration date of the existing permit. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review that apply to the initial permit. [WAC 173-401-710(1)&(2)]

47. Inspection and Entry. The permittee shall allow the permitting authority or an authorized representative to perform the following upon presentation of credentials and other documents as may be required by law:
    a. Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
    d. As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

    [WAC 173-401-630(2)]

48. Federally Enforceable Requirements. All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable by EPA and citizens under the FCAA, unless they are specifically designated as not federally enforceable. [WAC 173-401-625]

49. Reopening for Cause. This permit shall be reopened and revised under any of the following circumstances:
    a. Additional applicable requirements become applicable when the remaining permit term is greater than three years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).
    b. Additional requirements (including excess emissions requirements) become applicable under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated in the permit.
    c. Ecology determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
    d. Ecology determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

    Procedures to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. [WAC 173-401-730]

50. Tampering and False Statements. No person shall make any false material statement, representation or certification in any form, notice or report required in this permit. No person shall render inaccurate any monitoring device or method required under this permit. [WAC 173-400-105(7) and (8) and 40 CFR 70.11(a)]

51. Providing Additional Data. For Ecology to evaluate a plant's emissions or emission control program, the permittee shall furnish other data requested by Ecology. [WAC 173-405-072(5)]

PERMIT SHIELD/ INAPPLICABLE REQUIREMENTS

Pursuant to WAC 173-401-640(1), compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified in this permit, as of the date of permit issuance. This permit shield does not exempt the permittee from requirements, determined to be applicable, enacted after the permit issuance date. This permit shield shall not apply to any insignificant emission unit or activity designated under WAC 173-401-530. [WAC 173-401-530(3)]

Pursuant to WAC 173-401-640(2), the Department of Ecology has determined that the requirements listed in Appendix A of this permit do not apply to the facility, as of the date of permit issuance, for the reasons specified.

APPENDIX A

Permit Shield/Inapplicable Requirements
(See immediately following pages)

CITATION	SOURCE	TOPIC/PARAMETER	REASONING
WAC 173-400-040(1)	All sources	Opacity < 20%	Not applicable, since the specific limits set in WAC Chapter 405 take precedence.
WAC 173-400-040(3)(a)	Material handling/construction in attainment areas	Use reasonable methods to control fugitive emissions	Facility is located in a PM nonattainment area.
WAC 173-400-040(6)	Any emission unit	SO_2 emissions < 1,000 ppm	Not applicable, since the specific limits set in WAC Chapter 405 take precedence.
WAC 173-400-050(1)	Combustion sources	Grain loading (0.1 gr/dscf)	Not applicable, since the specific limits set in WAC Chapter 405 take precedence.
WAC 173-400-050(1)	Steam boiler firing wood derived fuel	< 0.2 gr/dscf (Using EPA Method 5 testing)	Not applicable, since the specific limits set in WAC Chapter 405 take precedence.
WAC 173-400-060	General process	Grain loading (0.1 gr/dscf)	Not applicable, since the specific limits set in WAC Chapter 405 take precedence.
WAC 173-410	NSSC process	Various	The NSSC process does not use a sulfurous acid in conjunction with a sulfite or bisulfite salt.
WAC 173-405-040(1)(b)	Recovery furnace stacks constructed before 1/1/70, and those recovery furnaces with direct-contact evaporators	TRS emissions < 17.5 ppm (8% O_2 daily average)	None constructed before 1/1/70, and none with direct-contact evaporators.
40 CFR 60.2	All sources	Definitions	General information and terms. Not applicable; no requirement described.
40 CFR 60.3	All sources	Units and Abbreviations	Abbreviations and symbols of units of measure. Not applicable; no requirement described.
40 CFR 60.4	All Sources	Address and Locations of Government Agencies	Not applicable; no requirement described.
40 CFR 60.5	N/A	Determination of Construction or	Requirement for state or federal agencies.

CITATION	SOURCE	TOPIC/PARAMETER	REASONING
		Modification	Not applicable; no requirement described.
40 CFR 60.6(a)	N/A	Review of Plans	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.9	N/A	Availability of Information	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.10	N/A	State Authority	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.11(e)(6)	N/A	Review of the Opacity Data vs. Performance Tests to Determine Opacity Standard	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.11(e)(7)	N/A	Granting Opacity Petition	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.11(e)(8)	N/A	Establishing Opacity Standard	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.13(i)	N/A	Alternate Monitoring Approval	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.13(j)	N/A	Alternate Test and Method Approval	Requirement for state or federal agencies. Not applicable; no requirement described.
40 CFR 60.14(h)	Electric utility steam generation unit	Various	Not applicable; not an existing electric utility steam generation unit.
40 CFR 60.14(i)	DOE repowering projects	Various	Not applicable; not a repowering project.
40 CFR 60.14(j)	Repowering project	Extension	Not applicable; not a repowering project.
40 CFR 60.14(k)	Temporary clean coal technology demonstration project	Various	Not applicable; not a temporary clean coal technology demonstration project.
40 CFR 60.14(l)	Very clean coal-fired electric utility steam generating unit	Reactivation	Not applicable; not a very clean coal-fired electric utility steam-generating unit.
40 CFR 60.16	All sources	Priority List	Not applicable; no requirement described.
40 CFR 60.17	All sources	Incorporations by Reference	Not applicable; no requirement described.
40 CFR Part 60 Subpart D	Industrial fossil fuel steam	Various	None after 1971 that meet applicability.

CITATION	SOURCE	TOPIC/PARAMETER	REASONING
	generators		
40 CFR Part 60 Subpart Da	Electric utility steam generators (fossil fuel)	Various	Not an electric utility.
40 CFR Part 60 Subpart Db	Industrial fossil fuel steam generators	Various	None after 1984.
40 CFR Part 60 Subpart Dc	Industrial fossil fuel steam generators	Various	None after 1989.
40 CFR Part 60 Subpart Kb except as specified in 40 CFR 60.116b(a-b)	Volatile organic liquid storage vessels	Various	Volatile organic liquid storage tanks at the mill with a capacity greater than 40 cubic meters contain liquids with a maximum true vapor pressure less than 3.5 kPa.
40 CFR § 60.283(a)(3)	Cross kraft recovery furnaces constructed after 9/24/76	TRS emissions < 25 ppm by volume on a dry basis corrected to 8% O_2	No cross kraft recovery furnaces present.
40 CFR § 60.284(d)(3)(ii)	Digester systems, brownstock washer systems, multiple-effect evaporator systems, and condensate stripper systems constructed after 9/24/76 for which gases are combusted in a lime kiln not subject to this subpart	Semiannual reporting requirements	Lime kiln is subject to the provisions of this subpart. Therefore, this regulation is not applicable to the named sources.
40 CFR § 60.285(d)(3)	Recovery furnaces constructed after 9/24/76	When determining whether a furnace is a straight kraft or cross recovery furnace, must use TAPPI Method T.624 three times daily	Based on the intrinsic system design of the recovery furnaces that the black liquor cannot exceed 7% of the total pulp solids from the NSSC process. Thus, the furnaces are of the straight kraft variety. No further determinations are required.

APPENDIX B

Permit Shield/Noncategorically, Nonapplicable Requirements
(See immediately following pages)

Those air quality requirements specifically identified in this Appendix for units subject to 40 CFR § 60 are considered inapplicable to all other units without qualifying actions on the part of either Ecology, the permittee, or both.

TOPIC/ PARAMETER	LIMIT & AVERAGE PERIOD	CITATION(S)	SOURCE	REASONING FOR NON-APPLICABLITY
Continuous Emissions Monitoring	Various	40 CFR 60.7 (c) 40 CFR 60.7 (d) 40 CFR 60.7 (e) 40 CFR 60.13(a) 40 CFR 60.13(b) 40 CFR 60.13(c) 40 CFR 60.13(d) 40 CFR 60.13(e) 40 CFR 60.13(f)	All sources except: No. 2 recovery furnace Lime kiln	These units have no requirement for continuous emissions monitoring.
Continuous Opacity Monitoring	Various	40 CFR 60.7 (a)(5) 40 CFR 60.7 (a)(6) 40 CFR 60.7 (a)(7) 40 CFR 60.11(b) 40 CFR 60.11(c) 40 CFR 60.11(e)(1) 40 CFR 60.11(e)(2) 40 CFR 60.11(e)(3) 40 CFR 60.11(e)(4) 40 CFR 60.11(e)(5) 40 CFR 60.13(c)	All sources except: No. 2 recovery furnace	These units have no requirement for continuous opacity monitoring.
TRS	5 ppmvd @ 8% O_2, 12-hour average	40 CFR 60.283(a)(2)	No. 3 recovery furnace	The unit was not constructed or modified after September 24, 1976.
Particulate	0.2 lbs/ton of black liquor solids (dry weight), hourly average	40 CFR 60.282(a)(2),	No. 3 smelt tank	The unit was not constructed or modified after September 24, 1976.

TOPIC/ PARAMETER	LIMIT & AVERAGE PERIOD	CITATION(S)	SOURCE	REASONING FOR NON-APPLICABLITY
TRS	0.033 lbs/ton of black liquor solids as H_2S, annual average	40 CFR 60.283(a)(4)	No. 3 smelt tank	The unit was not constructed or modified after September 24, 1976.
TRS emissions	< 5 ppm corrected to 10% O_2 unless controlled using one of the methods listed and other provisions of this section are met	40 CFR 60.283(a)(1)	Brownstock washers No. 1 and No. 2 M&D digesters No. 1 and No. 2 evaporator sets	These units were not constructed or modified after September 24, 1976. The No. 2 M&D digester was constructed prior to September 24, 1976, but was relocated to the Wallula, WA, site after the trigger date. This unit was not modified and is not subject to 40 CFR 60.
Reporting	Must report semiannually to the EPA periods of emissions for which the 12-hour TRS average exceeds 5 ppm (satisfies the requirements of 40 CFR 60.7(c))	40 CFR 60.284(d)(3)(i)	Brownstock washers No. 1 and No. 2 M&D digesters No. 1 and No. 2 evaporator sets	These units were not constructed or modified after September 24, 1976. The No. 2 M&D digester was constructed prior to September 24, 1976, but was relocated to the Wallula, WA, site after the trigger date. This unit was not modified and is not subject to 40 CFR 60.
The TRS concentration must be determined using EPA Method 16 with a sample time of at least three hours	Various	40 CFR 60.285(d)(1)	Brownstock washers No. 1 and No. 2 M&D digesters No. 1 and No. 2 evaporator sets	These units were not constructed or modified after September 24, 1976. The No. 2 M&D digester was constructed prior to September 24, 1976, but was relocated to the Wallula, WA, site after the trigger date. This unit was not modified and is not subject to 40 CFR 60.

TOPIC/ PARAMETER	LIMIT & AVERAGE PERIOD	CITATION(S)	SOURCE	REASONING FOR NON-APPLICABLITY
Oxygen concentrations for correcting TRS emissions must be determined using EPA Method 3B	Various	40 CFR 60.285(d)(2)	Brownstock washers No. 1 and No. 2 M&D digesters No. 1 and No. 2 evaporator sets	These units were not constructed or modified after September 24, 1976. The No. 2 M&D digester was constructed prior to September 24, 1976, but was relocated to the Wallula, WA, site after the trigger date. This unit was not modified and is not subject to 40 CFR 60.

APPENDIX C

Algorithms for Emissions Calculations

The following algorithms set forth the calculation method for those emission limits for which the designated reference method itself does not yield a direct emission measurement. The permittee may use an equivalent method with written approval from Ecology.

Reference Method-Dependent Emission Limits

Conditions I.A.1.a, I.A.1.b and I.B.1.a, I.B.1.b, and I.C.1.a, I.C.1.b, I.C.1.c, I.C.1.d, and I.D.1.a, I.D.1.b, and I.E.2.a, I.E.2.b, and I.F.1, I.F.2, and 2.F.1.

PM (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,
Concentration is Reference Method (RM)-dependent. For example, RM 5 yields particulate emission in terms of grains per dry standard cubic foot (gr/dscf).
Air Flow Rate must be representative of normal operations and is derived from the applicable RM in terms of dry standard cubic feet per minute.
Unit Conversion Factor is case-specific. For example, 1 pound = 7,000 grains.
Time Adjustment is case-specific and is dependent on the flow rate time unit.

This value will then be averaged with the preceding year of the applicable calculated PM emission rates (monthly, quarterly, or other test frequency, whichever applicable) to determine the rolling annual average.

Conditions I.A.4, I.A.5.a and I.B.6.b, and I.C.4, I.C.5, and I.F.6 and I.G.4.

SO2 (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,
Concentration is case-specific in terms of averaging period as required by the Permit.
Air Flow Rate must be representative of normal operations and is in the unit of dry standard in cubic feet per minute during the applicable source test period.
Unit Conversion Factor is case-specific. For example, the density of SO2, 0.166 lb per cubit foot of SO2 based on a molecular weight of 64 lb/lb mol and an ideal gas volume of standard conditions of 385ft3/lb.mol.
Time Adjustment is case-specific and is dependent on the flow rate time unit.

This value will then be averaged with the preceding year of the applicable calculated SO2 emission rates (monthly, quarterly, or other test frequency, whichever applicable) to determine the rolling annual average.

Conditions I.B.10.

VOC (mass per time) = Concentration * Annual Heat Input * Unit Conversion Factor

Where,
Concentration is RM-dependent. For example, RM 25A yields VOC emission in terms of lb/MMBtu.
Annual Heat Input is the Btu input to the No. 3 recovery furnace.
Unit Conversion Factor is case-specific. For example, 1 ton = 2000 lb.

B. CEM-Dependent Emission Limits

Condition I.A.5.b.

SO2 (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,
Concentration is case-specific in terms of averaging period as required by the Permit. Each emission unit limitation specifies the averaging period used by the CEM. For example, the CEM on the No. 2 recovery furnace derives an hourly average. The monthly average will be calculated based on the sum of valid individual hourly averages divided by the total number of valid hourly averages available.
Air Flow Rate must be representative of normal operation. For example, dry standard cubic feet per minute is obtained from the most recent particulate matter (PM) sampling period.
Unit Conversion Factor is pollutant-specific and involves molar mass and molar volume. For example, the unit conversion factor for SO2 is 64 lb/lb mol and an ideal gas of volume at standard conditions of 385 cubic feet.
Time Adjustment is case-specific and is dependent on the flow rate time unit.

The monthly values for the year will be summed to determine the annual average at the end of the calendar year.

Condition I.B.7 and 2.F.6.

NOx (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,
Concentration is case-specific in terms of averaging period as required by the Permit. Each emission unit limitation specifies the averaging period used by the CEM. For example, the CEM on the No. 2 recovery furnace derives an hourly average. The monthly average will be calculated based on the sum of valid individual hourly averages divided by the total number of valid hour averages available.
Air Flow Rate must be representative of normal operation. For example, dry standard cubic feet per minute is obtained from the most recent PM sampling period.
Unit Conversion Factor is pollutant-specific and involves molar mass and molar volume. For example, the unit conversion factor for nitrogen oxide is 0.1194 lb NOx per cubic foot of NOx.
Time Adjustment is case-specific and is dependent on the flow rate time unit.

The monthly values for the year will be summed to determine the annual average at the end of the calendar year.

Condition I.B.8, and 2.F.7.

CO (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,
Concentration is case-specific in terms of averaging period as required by the Permit. Each emission unit limitation specifies the averaging period used by the CEM. For example, the CEM on the No. 2 recovery furnace derives an hourly average. The monthly average will be calculated based on the sum of valid individual hourly averages divided by the total number of valid hour averages available.
Air Flow Rate must be representative of normal operation. For example, dry standard cubic feet per minute is obtained from the most recent PM sampling period.
Unit Conversion Factor is pollutant-specific and involves molar mass and molar volume. For example, the unit conversion factor for carbon monoxide is 0.0728 lb CO per cubic foot of CO based on a molecular weight of 28 lb/lb mol and an ideal gas volume of standard conditions of 385ft3/lb mol.
Time Adjustment is case-specific and is dependent on the flow rate time unit.

The monthly values for the year will be summed to determine the annual average at the end of the calendar year.

Condition I.A.6 and I.B.9.a and I.C.7.a, I.C.7.b, I.C.9 and I.D.4.

TRS (mass per time) = Concentration * Air Flow Rate * Unit Conversion Factor * Time Adjustment

Where,

Concentration is case-specific in terms of averaging period as required by the Permit. Each emission unit limitation specifies the averaging period used by the CEM. For example, the CEM on the No. 2 recovery furnace derives an hourly average. The monthly average will be calculated based on the sum of valid individual hourly averages divided by the total number of valid hour averages available.

Air Flow Rate must be representative of normal operation. For example, dry standard cubic feet per minute is obtained from the most recent PM sampling period.

Unit Conversion Factor is pollutant-specific and involves molar mass and molar volume. For example, the unit conversion factor for TRS as H2S is 0.0883 lb per cubic foot based on a molecular weight of 34 lb/lb mol and an ideal gas volume of standard conditions of 385ft3/lb mol.

Time Adjustment is case-specific and is dependent on the flow rate time unit.

The monthly values for the year will be summed to determine the annual average at the end of the calendar year.

APPENDIX D.

Glossary of Terms Used in the Air Operating Permit

Annual average. In defining the averaging period of a particular limit, annual average means the calendar year average. Determining compliance with a limit with an annual average shall be based on the unit's operation for a calendar year.

Calendar year average. The calendar year average is the average value of a given parameter over the period beginning on January 1 and ending on December 31.

Corrective action. Action taken by permittee with the intent of removing the identified deviation.

Intermittent compliance. For the purpose of annually certifying compliance, the permittee is considered to be in intermittent compliance with a permit term or condition if it is not in continuous compliance with the permit term or condition during the annual certification period.

In operation. In operation means engaged in activity related to the primary design function of the source. For example, a straight recovery furnace is in operation only when combusting black liquor, and a lime kiln is in operation only when feeding lime mud.

IPT-Initial Performance Plan-Detailed test plan outlining the test protocol in which operating parameters will be determined.

Rolling annual average. In defining the averaging period of a particulate emissions limit, the rolling annual average means the average of the emissions readings of the previous year leading up to the reporting date. For a rolling annual average limit with an associated monthly reporting requirement, the rolling annual average is a 12-month rolling average, calculated monthly. The need for this term is necessitated by the possibility of different reporting frequencies for a single emissions limit, based on the performance of the unit compared to the permit limit.

30-day rolling average. In defining the averaging period for MACT I pulping condensate collection, the 30-day rolling average means the average of the total HAPs collected per oven-dry ton of unbleached pulp in the previous 30 days leading up to the reporting date.

60-minute period. The period from the top of one hour to the top of the next hour (e.g., 07:00:00 to 07:59:59).

Visual opacity assessment. A visual opacity assessment as used in this Permit, is the use of an observer trained in general procedures for determining visible emissions, which could include EPA Method 9B or EPA Method 9. A trained observer does not need to have current certification in Method 9B. Under normal conditions, a trained observer will be present at the facility, while a certified Method 9B observer is not always readily available.

APPENDIX E

Reserved

APPENDIX F

Existing Orders and Permits

All of the following past permits and regulatory orders are applicable (included).

Order 1614-AQ04
Order DE 96-AQ-I078
PSD-X-77-04
PSD-95-04
PSD-01-07

All of the following past permits and regulatory orders are inapplicable (not included).

Regulatory Order 36-8
DE 78-112
DE 78-120
DE 88-112
DE 92-AQI045
DE 95-AQI053 Amendment 1
DE 95AQI055
DE 95AQI084 Modification 1
DE 96-AQI013

APPENDIX G.
Footnote key

1. Monitoring is required only when emission unit is operating.

2. If monitored emissions are equal to or less than 75% of the emission limitation for any six consecutive months, emissions will be monitored by three 1-hour test per quarter and reported quarterly.

If monitored emissions are less than or equal to 65% of the emission limitation for any four consecutive quarters, emissions will be monitored by three 1-hour tests per year and reported annually.

If monitored emissions are less than or equal to 50% of the emission limitation for any four consecutive quarters, emissions may be monitored by one 1-hour test per year and reported annually.

Three 1-hour tests averaging less than or equal to 50% of the limitation qualify for the 1-hour annual test per year option. The permittee shall conduct source testing within 105 days between two consecutive quarterly tests. If monitored emissions exceed the current threshold, the monitoring frequency will revert to the previous frequency. [PSD-X-77-04, WAC 173-401-615, or underlying applicable air order as basis for testing frequency flexibility]

3. Boise shall record levels of precipitator voltage and current during particulate compliance source testing for informational purposes only. [Order DE 02AQIS-3588]

4. If the total number of contiguous periods of excess emissions in a quarter is less than 6% of the total number of operating hours (excluding periods of start-up, shutdown, or malfunction) during the quarter, the excess emissions do not constitute a violation of this requirement. [40 CFR 63.864(c)(2)(i)]

5. A “unit exceedance day” is any 24-hour period during which one or more non-opacity monitoring exceedance(s) occur(s) at a specific affected unit. [40 CFR 63.864(c)(2)(iii)]

6. NCASI Technical Bulletin 604 fig 41 (a)

7. The PM10 emission limits satisfy the NSPS requirement of 0.044 grains per dry standard cubic feet in 40 CFR 52.21(j).

8. Further combustion of CO is expected to take place between the boiler outlet and the stack. The process combustion CO monitor is an internal process monitor and does not indicate direct emissions to the atmosphere.

9. The monitoring and reporting provisions contained within I.O.4, I.O.5, and I.O.6 shall be reopened and amended upon promulgation of changes to 40 CFR 63.453 by EPA.

10. Compliance with the provisions contained in section I.P. will be achieved no later than April 17, 2006, as provided by 40 CFR 63.440(d)(1).

11. CMS Data Recovery. State and federal regulations recognize that monitoring data may be lost for legitimate reasons. The permittee may be exempted from monitoring and reporting requirements during periods of monitoring system malfunctions, provided that the permittee shows that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [40 CFR §60.13(e); 40 CFR 63.8(c)(4); WAC 173-400-105(5)(h); WAC 173-405-077]

The permittee shall make every effort to acquire, maintain, and recover valid monitoring data. CMS downtime and resulting monitoring data loss due to malfunctions shall be less than 10% of the

monthly unit operating time. An acceptable explanation for the loss of monitoring data must be provided in the monthly report. Periods when CMS data is not recovered due to daily calibration, zero and span checks are not considered nor reported as CMS downtime in the monthly report. Records of daily calibration, zero and span checks shall be kept for a period of five years and made available upon request to Ecology. [WAC 173-401-615(1)(c); WAC 173-401-630(1)]

12. MACT CMS Performance Reports. The permittee shall record and report CMS downtime in the semi-annual MACT report. [40 CFR 63.10(e)]

13. NSPS CMS Performance Reports. The permittee shall record and report CMS downtime in the semi-annual report. [40 CFR §60.7(c) and (d) (2/12/99]

14. WA PSD/NSR/SIP CMS Performance Reports. The permittee shall record and report CMS downtime, other than calibration, zero and span checks, in the monthly report. In the case of monitor downtime due to system malfunctions, the report will address whether the malfunction was unavoidable, and repaired as expeditiously as practicable. [WAC 173-400-105(5)(h); WAC 173-405-077; WAC 173-401-615(1)(c); WAC 173-401-630(1)]